CHAPTER 6. Information for Parents – Roles, Responsibilities and Rights

(The word parent in this chapter will be used to indicate parent, guardian, or care provider.)

This chapter is designed for parents and can be copied for them to assist them in their roles, responsibilities and rights regarding their child or adolescent with diabetes at school. (It is not intended to provide education on diabetes self-care management).

Roles at diagnosis

Inform the school about your child's diabetes and set up a meeting with the school nurse to develop an Individual Care Plan (ICP).

Preparing for the school year

Preparation for the school year should start well before the first day of school. The following items should be completed in order to prepare the Individual Care Pan (ICP).

1. Parent Conference – A conference with the parents and school nurse to identify the student's needs, discuss components of the ICP, and develop the agenda for the planning meeting. During this meeting you should discuss the need for a 504 plan. The purpose of this meeting is to get to know one another, to share information about the student and the school, and to prepare for the Care Planning Meeting. The parents should bring supplies and items from the parent check list (Form 3, page 74) to this meeting. The forms should be completed in advance, with questionable details completed at the conference.

2. Complete all forms – (copies at end of chapter)
   - Form 4: Information Sheet- Diabetes Care in School (attach photo of child) This information will be used to develop an ICP
   - Pump Information Form (if needed)
   - Prescription Medication Order and Permission Forms for all medications to be given at school (forms should be signed by parent and/or health care provider)
   - Medical Statement for Students Requiring Modification in School Meals (if needed)

3. Planning Meeting – This school staff meeting should be held in the summer before school starts, or at diagnosis. The school nurse should organize and facilitate a planning meeting with the purpose to develop an ICP for the school setting. The meeting should include anyone that may have a role in the student's education and care. It may include:
   - Parent/guardian and student
   - Principal
   - School Nurse
   - Teacher
   - Bus Driver
   - Physical Education Teacher
   - Food Service personnel
   - Counselor
   - Members of the health care team

   The goal of the meeting is to provide basic knowledge of diabetes and its management, determine roles and responsibilities, decide where to store supplies/what to do in an emergency, and address other special accommodations.

4. Individual Care Plan – The school nurse will develop a plan based on the information from the two prior meetings. This plan may include a 504 plan. The plan should include:
   - Daily schedule – insulin, meals/snacks, and activity
   - Blood glucose monitoring – when, where, and by whom
   - How to respond to blood glucose results
   - Emergency contact information
   - Who can administer glucagon
   - Location of supplies and glucagon
   - Student's level of self-care
   - Field trip plan
   - Guidelines about when to call parents and health care team

5. Training – The school nurse will arrange training for school staff. The nurse will do the training with the assistance of the parents and/or the student's health care team. The purpose of the training is to educate and ensure the competence of the staff in the roles that were identified in the planning meeting.

6. Ongoing parent responsibilities:
   - Provide school with updated information
   - Provide school with enough supplies and snacks
   - Provide ongoing communication with the school staff
   - Meet with school nurse each year to revise the Individual Care Plan

7. Parents Rights

   Section 504 of the Rehabilitation Act of 1973

   According to Section 504 of the Rehabilitation Act of 1973 parents of qualifying children and adolescents have the right to develop a Section 504 Plan with their child's school. To qualify for protection under Section 504, a student must have a mental or physical impairment that interferes with a major life activity. Parents can access the law to ensure that, while at school, their child with diabetes can fully participate in all school activities, while maintaining their health care needs.

   Examples of accommodations include:
   - Adjusting monitoring procedures so that your child or adolescent can use the bathroom, have snacks, and monitor blood glucose levels
   - Individualizing assignments to make adjustments or repeat instructions when your child or adolescent has a high or low blood glucose during school
   - Ensuring that glucagon is available at any school function and that an individual is trained to administer it
   - Eating or drinking when necessary
   - Accessing the bathroom when necessary
   - Eating lunch and snacks at an appropriate times
   - Accommodating for absences related to medical visits
   - Assisting with self-care as appropriate

Individuals with Disabilities Education Act (IDEA)

The Individuals with Disabilities Education Act (IDEA) mandates that the federal government provide funding to education schools in order to provide free and appropriate education for students with disabilities. This may include students with diabetes. The school is required to develop an Individual Education Program (IEP) provided that his/her medical disability is significantly impacting the child's educational performance. In Vermont, a student is eligible for an IEP if:

1. The student has a disability.
2. The disability has an adverse affect on the student
3. There is a need for specialized instruction – not just accommodations.

American Disabilities Act

The American Disabilities Act law prohibits schools from discriminating against a student with a disability, this includes diabetes.

FORM 3: PARENT CHECK LIST

This checklist is provided to help parents identify the forms, supplies and other materials that they need to bring to the school. The list should be modified for individual students.

All items on the checklist should be sent to the school nurse.

- ☐ Data / Information form
- ☐ Photograph of child
- ☐ Monitoring supplies:
  Lancets, meter, strips, alcohol, ketone strips, etc.
- ☐ Snack / low kits. Number: _____
- ☐ Glucose tablets, Gel (tubes). Number _____
- ☐ Record keeping sheets
- ☐ Insulin and related supplies: Syringes, alcohol, etc.
- ☐ Pump Supplies (if applicable)
- ☐ Prescription Medication Order and Permission Form for Insulin
- ☐ Glucagon kits with pre-measured dosage. Number _____
- ☐ Prescription Medication Order and Permission Form for Glucagon

FORM 4: Information Sheet—Diabetes Care in School

To be completed by parent or legal guardian and used to develop an Individual Care Plan with the school staff

Student's Name: _____ Date of Birth:_____

Parent / Guardian:_____

Student's age at time of diagnosis: _____ Type:_____(1 or 2)

Contact phone numbers: (list by order in which calls should be made, and note if it is a parent, friend, or caregiver and whether the number is home and/or work.)

Call	Name	Phone	Location
1st			
2nd			
3rd			
4th			
5th			

Health Care Provider	Phone number

Monitoring: Target blood glucose _____to _____

Will be done in:	Will be performed:	Times:
□ classroom	□ by self	□
□ nurses office	□ with supervision	□
□ other	□ by trained school staff	□

Treatment:

Lows – below _____	Highs – Above _____
□ call parent	□ call parent
Treat with:	□ Give insulin (see below)
Usual signs:	□ check ketones if above _____

Insulin (☒ your answer below)

□ Yes □ No Will daily insulin be needed in school?

□ Yes □ No Will additional insulin be needed in school at any other time?

If YES to either, identify time, amount and circumstances for administering insulin. (Need physician order to be administered.)

Food

□ Yes □ No Will child participate in school breakfast and/or school lunch?

If YES, will modifications to the regular menu be needed? □ Yes □ No

If YES, fill out medical form for meal modifications

What are usual times for meals/snacks?

Breakfast_____ AM Snack_____ Lunch_____ PM Snack_____

Dinner_____

Exercise:

What are your child's favorite physical activities?

□ Yes □ No Will your child participate in school sports?

Parties and Special Occasions:

□ Yes □ No Do you wish to be contacted before each event?

Additional instructions for the school:

Emergencies:
What do you feel should be treated as an emergency?

Who do you want the school to call in an emergency?

- o Call parent (emergency number: _____)
- o Call health care team (contact number: _____)

Individuals trained to administer glucagon

1. _____

2. _____

Self Care:

Please put an X in the box that best describes your child/adolescent's role:	Independent with task	Completes task with supervision	Assists parent	Parent completes task
Picks finger				
Puts strip in monitor				
Reads monitor				
Records result				
Adjusts food based on result				
Adjust insulin based on result				
Knows which foods to limit				
Can select kind and amount of food				
Helps plan meals and snacks				
Determines amount and type of insulin				
Selects injection site				
Measures insulin				
Injects insulin				
Measures ketones				
Other				

FORM 5: PUMP INFORMATION

Student Name:_____
Pump Name and Model: _____
Pump Resource Person (trouble shooter):_____ Contact #:_____

Type of Insulin	
Blood glucose target range	
Insulin:Carb ratio	
Insulin Correction factor	

Pump skills	**Performs Independently**	**Requires help or supervision**
Counts carbohydrates		
Calculates bolus dose		
Calculates correction dose		
Calculates total dose		
Administer insulin bolus		
Adjusts for exercise		
Disconnects and reconnects tubing		
Inserts new infusion set		
Uses Standard Precautions		
Fills and Primes reservoir		
Trouble shoots alarms appropriately		
Identifies highs and lows		
Problem solves for highs		
Switches to injection if pump malfunctions		

Extra supplies: Where stored:_____
□ infusion set and reservoir
□ tape to secure infusion set
□ items to prep skin – IV prep
□ insulin and syringe (for malfunctions)
□ extra batteries
□ other

Notify Parent (check all that apply**)**
□ soreness and redness at site
□ detachment of dressing /infusion set
□ leakage of insulin
□ injection must be given
□ student has to change site
□ other

FORM 6: RELEASE OF INFORMATION, MEDICATION ORDER, AND PARENT PERMISSION

(Return to the school nurse)

*** * * RELEASE OF INFORMATIOM * * ***

Date: _____

I hereby give my permission to _____(*Physician's Name)* to release information to the staff at _____ (*School's Name*) concerning medications prescribed and their related health information for _____ (Student's Name).

Signature of parent or guardian: _____

*** * * MEDICATION ORDER * * ***

Medication: _____

Directions: _____

Begin Date:_____ Last Dose: _____

Reason for Medication: _____

Signature of Physician: _____

*** * * PERMISSION TO ADMINISTER * * ***

I hereby give my permission for the above named student to take the medication as prescribed at school.

Signature of Parent or guardian:_____

No medication will be given at school until the school receives this completed form with the prescribed medication in a container appropriately labeled by the pharmacy or physician.

Date Received:_____ Signature of School Nurse:_____

INSTRUCTIONS FOR COMPLETING FORM 7: *THE MEDICAL STATEMENT FOR STUDENTS REQUIRING MODIFICATIONS IN SCHOOL MEALS*

1. This form may be completed by a parent but must be signed by a physician if the student with diabetes requires meal modification. *A Major Life Activity* must be circled if the student requires special needs. In many cases it is "eating."
2. If the student does not have a disability it may be signed by a recognized "medical authority" which includes a physician, physician assistant, registered dietitian, registered nurse, or occupational therapist or other health professional specified by the Vermont Department of Education.
3. Check the required meal modification(s) the student needs. Both the modification category and the detailed type of modification should be checked. The more information provided, the better able the school is to meet the student's needs.
4. Food omission is most often needed due to a food allergy. Specify to what extent a food must be avoided. For example: "omit milk as a beverage", "omit foods which have milk or other dairy products as a major ingredient," "milk and all dairy products must be completely omitted from the diet." Food to be substituted**:** Be as specific as is reasonable. Typical substitutions would be: "juice for milk," "any other vegetable for tomatoes," "equivalent menu item which does not contain eggs," "fresh or unsweetened fruit for dessert," etc.
5. Special Utensils refers to special silverware, plates, cups or other items the student needs in order to eat the meal.
6. Other information includes needs which do not directly relate to the modification of a food such as: fluid intake at other than meal time; additional time to eat or specific timing of a meal or snack; feeding techniques.

Note: The responsibility of the Food Service is to accommodate the medical needs of the student, not personal food preferences. When menus are reviewed and appropriate substitutions are offered, the family may choose to occasionally pack a student's lunch.

Once completed, the form should be returned to the Food Service Manager who, with the input of the parents and appropriate school staff, will establish the necessary routines to provide the modified meal. The original copy of the Medical Statement should be kept on permanent file in the nurse's office or food service office. It remains in effect until replaced or inactivated.

Form 7: Medical Statement for Students Requiring Modifications in School Meals

Name of Student:	Birth date:
Name of Parent/Guardian:	Daytime Phone:

Disability or Medical Condition requiring modification of school meals: *Diabetes*	**Major life activity affected** by student's disability *(please circle all that apply)*: Caring for one's self, eating, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, working.

Required Meal Modification *(check all which apply):*

_____RESTRICTED NUTRIENT	_____INCREASED NUTRIENT	_____MODIFIED TEXTURE
_____ Calorie _____ Controlled Carbohydrate _____ Protein _____ Sodium _____ Fat/Cholesterol	_____ Calorie _____Protein _____Fiber _____Other:	Describe required modification:

_____FOODS TO BE OMITTED FROM THE DIET

List all that apply:	Foods that may be substituted:

Special Utensils Needed:

Tube Feeding Required:

Other Accommodations needed:

For student with a disability:

Signature of Physician: _____ Date: _____

For non-disabled student:

Signature of Other Medical Authority: _____ Date: _____

NOTE: To complete this form, use the single page version available in the appendices on page 109.

CHAPTER 7. Regulations Affecting School Populations

FEDERAL LEGISLATION

Federal legislation ensuring non-discrimination of school aged children and adolescents include specific protection for students with diabetes. Section 504 of the Rehabilitation Act of 1973 is a civil rights provision, which prohibits discrimination on the basis of handicap by recipients of federal funds. The law states that "no otherwise qualified individual with handicaps in the United States...shall solely by reason of his or her disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance..."

The term "program or activity" includes all programs or activities of the Vermont Department of Education and all schools and school districts receiving federal funds regardless of whether the specific program or activity involved are a direct recipient of federal funds.

SECTION 504

Section 504 identifies an individual with a disability as any person who: "*has a physical or mental impairment which substantially limits participation in one or more of major life activities such as caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working."*

Diabetes is a physiological disorder which affects the endocrine system, placing the individual at risk for hypoglycemic and hyperglycemic episodes related to this metabolic dysfunction. Potential fluctuations in blood glucose impact the individual's major life activities as described above. Reasonable accommodations can be planned and documented in a 504 plan by a designated 504 case manager in each school district. Unless other special education issues exist, the case manager should be the school nurse.

The written 504 plan provides for clearly understood and accepted interventions which support the student and school personnel**.** Potential discrimination can best be addressed by education of personnel involved in the day to day life of the student with diabetes.

Guidelines for accommodations under Section 504 of the Rehabilitation Act of 1973

Students with disabilities may be eligible for specific health and education-related accommodations to be made in schools. The elements in the following list may serve as basic guidelines for planning the daily interventions for a student with diabetes in the school setting.

- Monitoring blood glucose (when, where)
- Treating hypoglycemia
- Injecting insulin when necessary
- Eating snacks when necessary
- Participating in the school meal program
- Allowing flexible time for eating meals and snacks
- Allowing free and unrestricted access to water and the bathroom
- Accommodating the student's schedule for absences due to medical appointments
- Participating in physical education (gym class) and other extracurricular activities including field trips

INDIVIDUALS WITH DISABILITIES EDUCATION ACT (IDEA)

IDEA provides federal funds to assist schools in making special education and related services available to eligible students with disabilities. A student with a disability must meet the criteria of one or more of 13 categories and need special education and related services. The IDEA category of "other health impairment" includes diabetes as one of the health conditions listed. To qualify under IDEA, the student's diabetes must also adversely affect educational performance to the point that the student requires special education and related services. Generally, if a student with diabetes does not need special education services, that student is not eligible under IDEA. This student might still be eligible for services under Section 504.

SAMPLE 504 AND ACCOMMODATION PLAN

Student Name: *Mary Jones* Date of Birth: *6/15/96* Date: 9/9/05

Grade: 4 Teacher: Ms. Smith

Date of Disability Determination: *08/15/02* Case Manager: *Susan Doe, RN*

Area of disability that "substantially limits a major life activity"/Description of how this disability limits a major life activity:

- Mary has Type 1 diabetes. This is a condition in which the pancreas is unable to make insulin. Without insulin, the body cannot change glucose (sugar) into the energy a person needs. To compensate for the lack of natural insulin, she must take daily insulin injections, usually at home but sometimes in school.
- Mary's daily insulin injections must be balanced with her meals, snacks and regular physical activity. To consistently achieve this balance, she must eat daily snacks and meals on a regular schedule. During the school day she must check her blood sugar before lunch, and physical education class, as well as when her body tells her that her blood sugar is low or too high.
- While Mary is achieving independence in self-management of her diabetes, the adults who work with her will need to be supportive and understanding about the daily regimen. Her self-care needs will be integrated into the school day so there are minimal interruptions in the learning environment.
- Mary is generally responsible and independent about her blood sugar monitoring, diet, and necessary equipment. The adults in the school community will help by reminding Mary to bring her diabetes pack to all out-of-school trips and to keep it with her when she is away from the classroom for extended periods of time. Mary will need this reminder especially before special events.
- Mary's blood sugar levels affect the way he/she learns.
- Mary's behavior is related to blood sugar levels. She can feel "racey" and excited when her blood sugar is high or tired and "spacey" when it is low.

- When Mary is excited and/or stressed as in a testing situation, her blood sugar can potentially go up. When her blood sugar is high (over 200) her body responds by trying to decrease this sugar level. She may become thirstier as her body is acting to dilute or flush out the extra sugar. She needs to drink more water and then urinate more frequently.
- The learning environment is altered when Mary must stop an activity to test her blood sugar, go to the bathroom, eat a snack or get a drink of water.
- Mary must continuously remind herself to monitor her blood sugar at appropriate times, to eat/exercise regularly and to bring supplies with her. This self-monitoring is a big task and is a distraction in itself.

I. **Home/School Communication:** To develop parent/student school communications:

1. There will be on going communication between parents and case manager.
2. Parent-teacher meetings will be scheduled at regular times especially at the beginning of the school year and other transition times. Parents want to be contacted immediately if any academic or social concerns arise.
3. Health concerns will be addressed as the need indicates.
4. Consistency is important in Mary's academic plan. Transition meetings including last and current teaching staff, nursing and parents will be scheduled.

II. **<u>Organization/Management</u>:** To modify the instructional day:

1. Mary will need modification of non-academic time (long lunch, extra snack period on occasion).

III. **<u>Alternative Teaching Strategies/Accommodations</u>:** To modify teaching methods:

1. Adjust testing procedures:
   - Mary may need to have open bathroom privileges during standardized tests. She should be seated so she can come and go from the room easily. Please remind her that she can go at anytime despite testing rules.
   - Mary must keep her low kit with equipment and snacks next to her in the testing area.
   - If Mary goes to the bathroom before or during the testing, special accommodations may need to be made to repeat instructions or to lengthen her testing time.
   - Mary may need to have snack at different times and intervals than the other students.

2. Individualize classroom/homework assignments:
   - There will be a need to explain assignments or adjust them if Mary's blood glucose is unusually high or low on certain days. Her level of concentration is affected and she will need accommodations.

3. Repeat or structure instructions for in-class or homework assignments.
   - Mary may miss part of an assignment or a class while testing, in the bathroom or eating his/her snack. Repeating verbal/written instructions will be needed.
   - If Mary's blood sugar is unusually high or low (>250 or < 70), she may feel shaky, slightly disoriented or very distracted. The classroom teacher will need to revisit instructions or concepts she may have missed in class.

The following related aids and services are recommended:

1. Health services: The school nurse will be available on a daily basis to provide support and guidance to Mary and the school staff. A trained substitute nurse will be available if Susan Doe is not in school.
   - Mary's classroom teacher and one other adult staff member will be trained in the administration of Glucagon.
   - Susan Doe, RN, will inform all appropriate teaching staff and cafeteria staff about condition and what to do in an emergency.

2. Equipment and Food Items
   - Mary will carry her own glucometer, finger lancets and glucose strips. She will also carry a low kit with juice, and a snack.
   - There will be extra juice, and snacks kept in the classroom area, the library and in exploratory classes as needed.
   - The nurse's office will have extra juice, crackers, peanut butter and other snacks for Mary and will keep a vial of insulin, extra glucose strips, syringes and ketone strips for urgent use. A Glucagon kit will be kept in the locked medicine cabinet in the nurse's office.
   - Mary's parents will provide all food and equipment to the school. Susan Doe, RN, will be responsible for distributing the food and maintaining the supply

VERMONT

Department of Health

Safe Disposal of Syringes and Lancets

- Find and empty a plastic bottle that has a screw-type cap. Examples: bleach, fabric softener, detergent or shampoo bottles. The #1 plastic soda bottle is recommended because it is more puncture-resistance. It is identified with a "1" inside a triangle of arrows on the bottom of the bottle.
- Label the bottle with a warning "DO NOT RECYCLE".
- After you use a syringe or lancet, drop it into the bottle. Don't break off the needles; drop in the whole syringe and recap the bottle.
- Don't fill the bottle to the top with needles. Leave a few inches of space at the top.
- When you are ready to discard the bottle, tightly close the cap and place heavy tape over the closed cap.
- Discard the bottle in your household trash. Do Not Recycle.

Do not throw syringes or lancets in the trash

unless they are contained in a bottle.

Do not flush syringes or lancets down the toilet.

Do not burn syringes or lancets.

Vermont Department of Health, Diabetes Prevention and Control Program
108 Cherry Street, Burlington, VT 05402

Revised 4/08/04

INTERNET RESOURCES

American Academy of Family Physicians	www.aafp.org
American Academy of Pediatrics	www.aap.org
American Association of Diabetes Educators	www.aadenet.org
American Association for Health Education	www.aahperd.org/aahe
*American Diabetes Association	www.diabetes.org
American Dietetic Association	www.eatright.org
American School Health Association	www.ashaweb.org
Celiac Sprue Association	www.csaceliacs.org
Center for Disease Control, Diabetes Public Health Resource	www.cdc.gov/diabetes
Center for Disease Control: Diabetes Project Children and Diabetes	www.cdc.gov/diabetes/projects/diab_child.htm
Children with Diabetes	www.childrenwithdiabetes.com
Diabetes Action Research and Education Foundation	www.daref.org
Diabetes Exercise and Sports Association	www.diabetes-exercise.org
Helping the Student with Diabetes Succeed	www.ndep.nih.gov/diabetes/pubs/Youth_SchoolGuide.pdf
Insulin Pumpers	www.insulin-pumpers.org
Joslin Diabetes Center	www.joslin.harvard.edu
Juvenile Diabetes Research Foundation International	www.jdrf.org
National Association of School Nurses	www.nasn.org
National Diabetes Education Program	www.ndep.nih.gov/
National Information Center for Children and Youth with Disabilities	www.nichcy.org
New England diabetes camps	www.campcarefreekids.org www.bartoncenter.org www.joslin.harvard.edu/jboston/camp.shtml

Parent to Parent of Vermont	www.Partoparvt.org
Pediatric Adolescent Diabetes Research and Education Foundation	www.padrefoundation.org
Pediatric Endocrinology Nursing Society	www.pens.org
Pediatric Education for Diabetes in Schools	www.pedsonline.org
The Diabetes Monitor	www.mdcc.com
U.S. Department of Agriculture Food and Nutrition Information Center	www.nal.usda.gov/fnic
Vermont Association of Diabetes Educators	www.vpqhc.org/VTADE
Vermont Department of Education	www.state.vt.us/educ
Vermont Department of Health (Recommendations for the Management of Diabetes for Children in School)	www.state.vt.us/health/pubs.htm
Vermont Parent Information Center	www.vtpic.com
Vermont State School Nurses Association	www.vssna.org

- The American Diabetes Association's website has a number of computer programs that can be downloaded and used for education purposes. The programs are listed under *School Discrimination*.

Carbohydrate Counting

What is a carbohydrate?

Carbohydrates are nutrients found in many foods. Carbohydrates are the body's preferred source of energy and therefore have the biggest impact on blood glucose. Foods with carbohydrates include starches, grains, bread, pasta, cereal, fruit, vegetables, legumes, milk, yogurt, and any food or beverage that contains sugar or flour. Meats or proteins and fats have very little or no carbohydrates.

Are carbohydrates healthy?

Healthy foods with carbohydrates include fruits, vegetables, whole-grains, and low fat milk. They should be consumed daily. Other foods with carbohydrates such as soda, candy, fast foods, donuts, cookies and cakes are high in processed sugar and fat and therefore provide little nutrition. These foods should be used in moderation.

How do carbohydrates affect blood glucose levels?

Most of the carbohydrates that are eaten are broken down to glucose or sugar and absorbed in the blood stream to be used for energy. When blood glucose levels increase, the pancreas makes insulin. Insulin helps move glucose into cells.

Sources of carbohydrates

<u>Starches/Grains (each serving has 15 grams of carbohydrates)</u>

1 slice bread or small roll
1/3 cup cooked pasta or rice
¾ cup unsweetened cereal
½ cup corn or peas
6 saltine crackers
1 6" tortilla or taco shell
½ of a hamburg/hotdog bun
½ of a small bagel

Milk Products (each serving has 12 grams of carbohydrates)

1 cup milk
½ cup chocolate milk
1 cup *lite* yogurt
½ cup ice cream
½ cup low sugar pudding

Fruits (each serving has 15 grams carbohydrates)

1 small apple, orange, pear, banana
15 grapes
1 cup fresh berries or melon
½ cup juice
½ cup canned fruit
2 tbsp dried fruit

Vegetables (each serving has 5 grams carbohydrates)

1 cup raw vegetable
½ cup cooked vegetable (except corn, peas, potatoes, or dried beans)
½ cup tomato juice

Other foods and approximate grams of carbohydrate

1 cup soup – 15 grams
1 cup casserole - 30 grams
1 Tbsp jelly – 15 grams
2 Tbsp peanut putter – 6 grams

Vermont Association
====== of ======
Diabetes Educators
December 2005

Directory of Diabetes Education Programs in Vermont

Directory of Diabetes Education Programs in Vermont

(Note: Most programs listed below are recognized by the American Diabetes Association. Please check directly with contact people below to inquire whether the program is ADA-recognized.)

BRATTLEBORO HOSPITAL/SVHHA

Contact: Houghton Smith, RN, CDE
Location: 17 Belmont Ave.
Brattleboro, VT 05301
802-251-8429

CENTRAL VERMONT MEDICAL CENTER

Contact: Sylvia Gaboriault, MS, RD, CDE
Ilene Siegel, RD,CDE
Amanda Melville, RN
Connie Lanphear, RN

(802) 371-5945 or 371-4152
(802) 371-5367 (fax)
Sylvia.Gaboriault@hitchcock.org

Location: 130 Fisher Road
Berlin, Vermont 05602

Program: **Outpatient Services for Diabetes Education**
Clinic is open weekdays for any individual in need of information regarding diabetes self-management education or nutritional consultation.

Program: **Self-Management and Diabetes Group Education Program**
This 12-hour series is ongoing throughout the year and covers diabetes etiology, medication and insulin administration, nutritional management, glucose monitoring, foot care, long and short term complications. The classes are open to any individual with diabetes and/or their significant others. Individual counseling sessions with a CDE/RD and a CDE/RN are available with this program.

COPLEY HOSPITAL DIABETES EDUCATION PROGRAM

Contact: Loretta Schneider, RN, CDE
Nancy Wagner, RD,CDE
(802) 888-8226 for registration

Location: Copley Hospital
Outreach Department
528 Washington Highway
Morrisville, Vermont 05661

Program: **One-on-one counseling and gestational diabetes education** by appointment.

DIABETES CENTER OF THE LAMOILLE VALLEY AT JOHNSON HEALTH CLINIC

Contact: Dorothy Malone-Rising, MS, RN-CS, ANP, CDE
Cindy Storey, office manager
(802) 635-6689
(802) 635-7435 (fax)
Dodie@pwshift.com
www.diabetes-vermont.com

Location: 384 Lower Main West
P.O. Box 318
Johnson, VT 05656

Program: **Introduction to Diabetes Management**
Individual instruction on Basic Survival Skills for the newly diagnosed diabetic and family members, including basic nutrition, self-glucose monitoring, the role of exercise and medications, and avoiding and treating high and low sugar levels.

Program: **Diabetes and You: A Self-Management Education Series For People With Diabetes And Their Families**
This group education program, recognized by the American Diabetes Association (ADA), consists of five 2 hour sessions preparing people to manage their diabetes. This program is appropriate for people with type 1, type 2 or gestational diabetes. Faculty includes a Nurse Practitioner and Registered Dietitian, both Certified Diabetes Educators. Patients may enter the program through self referral or by

referral of their medical provider. Participants receive a comprehensive assessment prior to participation, and are invited to a reunion session six weeks after completing the course.

Program: **Individual Outpatient Diabetes Education**
Covers the content of the group education program when group education is not appropriate. Available by appointment.

Program: **Insulin Start and Adjustment**
Individual instruction is offered for the initiation of insulin therapy. In addition, frequent contact is available with the Nurse Practitioner/Certified Diabetes Educator to adjust insulin doses to achieve tight control in collaboration with the primary care provider.

Program: **Insulin Pump Program**

Intensive individual preparation for and training in the use of Continuous Subcutaneous Insulin Infusion pump for the management of diabetes.

Program: **Diabetes Support Group**

Meets the 3rd Thursday of each month from 6-8 PM. Contact the office for details.

DIABETES EDUCATION AND MANAGEMENT IS COVERED BY MOST INSURANCE PROGRAMS. Sliding fee scale available for those without insurance coverage.

FLETCHER ALLEN HEALTH CARE

Children's Specialty Center at Vermont Children's Hospital

Contact: PJ Zimakas, MD
Mary Alice Giannoni, MSN, ANP, CDE
Rebecca Beaudoin, RN,CDE
Alison Precourt, RD,CD,CDE
Rebecca Currier, PhD
(802) 847-6200
(802) 847-5364 (fax)
mary.giannoni@vtmednet.org

Location: Children's Specialty Center at Fletcher Allen Health Care
Ambulatory Care Center
Burlington, VT 05401

Program: **Diabetes Care Program for Children and Adolescents**

A comprehensive orientation and education program for children and adolescents with diabetes and their families provided in an out-patient setting. The programs are taught by certified diabetes educators.

Vermont Regional Diabetes Center at Fletcher Allen Health Care

Contact: Kristin Magnant, RN (VRDC Care Coordinator)

Jack Leahy, MD
Muriel Nathan, MD,
Afshin Salsali, MD
Joel Schnure, MD

Ann Gotham, NP
Margaret Costello, FNP, CDE

Lisa Bolduc-Bissell, RN ,CDE
Krissy Botlon, RD, CDE
Rhonda Lapidow, RN, CDE

(802) 847-4576
(802) 847-2226 fax

Location: University Health Center Campus
1 South Prospect Street
Burlington, VT 05401

Program: The Vermont Regional Diabetes Center (VRDC) uses a multi-disciplinary approach to teaching people about diabetes. Patients of the VRDC have the opportunity to meet with physicians, nurse practioners, registered nurses, registered dietitians, and certified diabetes educators. Individual counseling as well as group classes are available.

Diabetes Survival Skills

This class is designed for people with newly diagnosed type 2 diabetes. It covers basic management of diabetes including blood glucose monitoring, nutrition, and exercise. A glucometer will be provided at no cost to the participant. This class is offered several times monthly and is taught by certified diabetes educators.

Living Well with Diabetes

This class is a nationally accredited course designed for people with type 2 diabetes and their support person – whether newly diagnosed or seeking more education to successfully self-manage their care. This course consists of either a series of evening classes or day classes. At the completion of the course, there is an individual follow-up session with either a nurse or dietitian, depending on individual needs. The instructors are certified diabetes educators in the fields of nursing and nutrition.

Is An Insulin Pump For You?

This pump information class is designed to inform participants about the various pumps and pump accessories on the market. A hands-on demonstration is an integral part of this class. Literature is provided so that participants may do "research" at home. In addition to the hardware associated with pumps, there is also a discussion on the pros and cons of pump therapy, and the skills that prospective pump patients must have before they are granted permission to proceed with obtaining a pump. This class is offered once a month for 2 hours.

Count Your Carbs and Eat Them Too!

This class is for people who need or want to learn carbohydrate counting as a meal planning approach. Participants will learn basic skills to help them determine carbohydrate intake throughout the day. Discussion will focus on carbohydrate food groups, serving sizes, helpful tools and resources. This class is offered in conjunction with "Is an Insulin Pump for you" and is taught by certified diabetes educators.

Insulin Pump School

The insulin pump program is offered to patients pursuing pump therapy. The program includes the mechanical instruction of the pumps, saline trials, initiation of insulin, blood glucose monitoring and general instruction on pump management of diabetes. This program is offered through individual and group classes and is taught by certified diabetes educators. Participants must first attend "Is an Insulin Pump for you". There are various levels of classes for the insulin pump school which are offered monthly.

Clinical Trial Unit

Clinical research focused on people with diabetes providing health care, laboratory testing, nutritional counseling, blood glucose monitoring supplies, and study related medications. Contact Autumn Bolus at (802) 847-8908.

Inpatient Education at Fletcher Allen Health Care

Contact: Laurinda Poirier-Solomon RN, MPH, CDE

Contact specific in-patient care unit: 847-8675

Location: Fletcher Allen Health Care In-patient units at MCHV and FAH campuses

Program: **Diabetes Education for In-patients**

Individual diabetes counseling.

GIFFORD MEDICAL CENTER

Contact: Sherry Barnard, BSN, RN
Diabetes Coordinator
(802) 728-2295
sbarnard@giffordmed.org

Jennifer Stratton, RD-by appointment: 802-728-2260
jstratton@giffordmed.org

Jane McConnell RPh,
jmcconnell@giffordmed.org

(802) 728-4441
(802) 728-2201 fax

Location: 45 South Main St
Randolph, VT 05060

Program: **Diabetes Outpatient Clinic**
The hours of clinic are Tuesdays, 8:00-4:30 PM and Thursdays 8:00-4:30 PM for any patient in need of diabetes education. Call for information about comprehensive diabetes courses and survival skills classes.

Program: **Diabetic Support Group**
The group meets monthly from September through May at Gifford Medical Center
from 3:30 PM to 4:30 PM. Format varies from group discussions, guests speakers, films.

GREEN MOUNTAIN NUTRITION ASSOCIATES

Contact: Janice Waterman, RD, CDE
(802) 476-7607
(802) 229-5076 (fax)
gmnwaterman@aol.com

Sue Johansen, RD, CDE
(802) 476-7607
(802) 244-4122 (fax)
gmnajoha@vtlink.net

Location: The Medicine Shoppe
20 South Main St
Barre, Vt 05641
(802) 476-7607

Program: **Individualized Diabetes Management and Education**
Registered dietitians and certified diabetes educators specializing in diabetes and cardiovascular disease. Diabetes education and medical nutrition therapy tailored to meet individual needs. Home visits scheduled if needed.

MOUNT ASCUTNEY HOSPITAL AND HEALTH CARE CENTER

Contact: Jennifer Wilson, RN, CDE
Jennifer.M.Wilson@Hitchcock.org
(802) 674-7198

Location: 289 Country Road
Windsor, Vt 05089
(802) 674-7300
(802) 674-7314 (fax)

Program: **Mt. Ascutney Hospital and Health Center Outpatient Clinic**
Individualized education provided via physician referral to RN and RD as a component of the Diabetes Self Management Program.

Program: **Support Group**
Held at Mt. Ascutney Hospital every second Wednesday morning at 10:30 a.m. – 11:30 a.m. Facilitated by Elizabeth Smurkowski, RD.

Program: **Diabetes Survival Skills**

Group educational program for patients and families. Survival Skills is a 3 hour program offered once a month. Fit and Health Kidstyle is a prevention program for children age 8 – 12 and their parents. Instructors include a Nurse, Dietitian, Physician, and Exercise Specialist.

NORTH COUNTRY HOSPITAL

Contact: Anick Desorcy, RD,CD Diabetes nutrition educator
(802) 334-4155
adesorcy@nchsi.org

Brenda Wierschke, RD,CD Support groups
(802) 334-3210 ext 329

Winnie Jones, RN Diabetes nurse educator
(802) 334-3263
wjones@nchsi.org

Joan Wheeler, RN, CDE Diabetes education coordinator
(802) 334-3264
jwheeler@nchsi.org

Location : North Country Hospital
189 Prouty Drive
Newport, VT 05855
(802) 334-4155

Program: **Diabetes Education Program (group education)**
Healthy Living with Diabetes – *Diabetes Basics*
A 3 hour introduction to diabetes. Referral by physician.

Healthy Living with Diabetes – *Beyond Basics*
A 12 hour comprehensive diabetes education course. Referral by physician.

One on One Counseling
With a diabetes nurse educator and /or clinical dietitian.
Individualized treatment plans. Referral by physician.

Support Group for Individuals with Type 2 Diabetes and their Families

Monthly meetings held the 2nd Monday of every month from 6:00 pm to 7:00 pm at North Country Hospital in the Meeting Room.

NORTHEAST VERMONT REGIONAL HOSPITAL

Contact: Virginia Flanders, RD, CD, CDE
(802) 748-7433
(802) 748-7302 fax

Location: Northeast Vermont Regional Hospital
PO Box 905
St. Johnsbury, VT 05819

Program: **Living with Diabetes (group session)**
Offered 3 times a year. Six 2 hour sessions

Diabetes Survival Class
For people with newly diagnosed diabetes. Offered twice a month,

Individual outpatient diabetes education by appointment.

NORTHWEST MEDICAL CENTER

Contact: Deborah Robertson, RN, BSN, CDE
Kay Tran, MS, RD, CDE

(802) 524-1031
(800) 696-0321
(802) 524-1238 fax

Location: P.O. Box 1370
Fairfield Street
St Albans, VT 05478

Program: **Individual outpatient diabetes education by appointment**.

Program: **Diabetes and You: A self-management education series for people with diabetes and their families**

This group education program consists of five 2 hour sessions preparing people to manage their diabetes. Faculty includes a Nurse who is a Certified Diabetes Educator, a Registered Dietitian, Physical Therapist, and Behavioral Therapist. Four follow-up sessions are held over the year following the program. Patients may enter the program through self referral or by referral from their medical provider.

Program: **Insulin start**
Individual instruction is offered for the initiation of insulin therapy.

Program: **Endocrine Clinic**
4th Wednesday of each month patients are seen by a comprehensive team including an Endocrinologist from Fletcher Allen Health Care Center, RN/CDE and RD.

Program: **Franklin County Support Group**
Serving adults with diabetes. Meetings are held the third Monday of each month at 11:30 and 5:00 at Northwestern Medical Center. Free luncheon or dinner is provided.

Program: **Pump Pals Support Group**
Meets the 3rd Monday of each month at 5:00 PM, includes a free dinner.

Program: **Gestational Diabetes Education**

PORTER MEDICAL CENTER

Contact: Elaine Coon, RN, CDE
Staff Development Coordinator
(802) 388-4723
(802) 388-4799 fax
ECoon@portermedical.org

Location: 115 Porter Drive
Middlebury, VT 05753

Program: **Individual nutritional consultations**
Call 802- 388-4701 ext 776

Program: **Basic Diabetes Education Program**:
This three-hour class is offered twice a month for people with newly diagnosed diabetes and their families.

Program: **Support Group**
Bristol, VT: meets 3rd Wednesday of each month 1-3 pm.
Middlebury, VT: meets 2nd Thursday of each month 7:00 pm – 8:30 pm.

RUTLAND REGION DIABETES and ENDOCRINOLOGY CENTER

Contact: Donna Hunt, RD, CDE, Program Coordinator
dhunt@rrmc.org
(802) 775-2703

Judy Fuller, RN
jfuller@rrmc.org
(802) 775-2703

Sarah Narkewicz, RN MS CDE (special projects)
snarkewicz@rrmc.org
(802) 747-3770

Mary Robinson, FNP, Nurse Practitioner
mrobinson@rrmc.org
(802) 775-7844

Medical Director: Phil Lapp, MD, FACE Endocrinologist
(802) 775-7844

Location: 8 Albert Cree Drive
Rutland, Vt 05701

Program: **Diabetes: The Basics of Self Care** (Group Class and Individual Sessions)
RRMC offers an A.D.A. recognized comprehensive diabetes education program, including one-on-one sessions or group classes. The course covers: defining diabetes, nutrition, medications, monitoring, exercise, stress reduction, and acute and chronic complications.

Program: **Adult Clinic**
Offered weekdays with ongoing support by nurse and dietitian team.

Program: **Pediatric Clinic**
Offered quarterly with ongoing support by a nurse-dietitian team. Medical care provided by Philip Lapp, MD and Mary Robinson, FNP.

Program: **Gestational Program**
Meter loaner program and nutrition education available.

Program: **Insulin Pump Program**
Education and ongoing support and management provided for patients choosing insulin pump therapy.

Program: **Support Groups** – call 802-775-2703 for meeting time/place.
Adult support group meets the 4th Monday of the month.
Insulin Pump support group meets the third Tuesday of the month.
"Sugar Bugs" pediatric support group for families affected by diabetes available through a community member.

SOUTHWESTERN VERMONT MEDICAL CENTER

Contact: Office:
(802) 447-5315
(802) 447-5098(fax)
PEC@phin.org

Pat Carpenter, RN, CDE
(802) 447-5315
Paula Haytko, BA, RN, CDE
(802) 447-5650
Tim Marr, MS, RD, CDE
(802) 447-5578
Rachel Rodney, RD
(802) 447-5577

Location: 140 Hospital Drive
Room 308, Medical Office Building
Bennington, VT 05201
(Mailing address: 100 Hospital Drive, Box 12, Bennington, VT 05201)

Program: **Diabetes Education Program**
Individual and group instruction for patients, their families and significant others to learn self-management of diabetes. Also available are classes on insulin instruction, insulin pump therapy, and gestational diabetes. All sessions by appointment.

Program: **Diabetes Support Groups**
Meets the 4th Tuesday of every month from 6:30 pm to 7:30 pm at the Manchester Elementary School. No meetings in the summer (June-August). Periodic evening support group programs are held in Bennington. Notices appear in all the local newspapers and in the Wellness Connection.

SPRINGFIELD HOSPITAL

Contact: Marcia Manner, RNC, CDE
Diabetes Education Coordinator
(802) 885-7508
mmanner@springfieldhospital.org

Barbara Bye, RD, CDE
(802) 885-7670
bbye@springfieldhospital.org

(802) 885-7367 fax

Location: P.O. Box 2003
Springfield, VT 05156

Program: **Springfield Hospital Diabetes Education Program**
Individual outpatient instruction by physician referral or self-referral. Individual in-patient education for newly diagnosed patients with outpatient follow-up as needed, and for patients with history of diabetes.
Group classes held periodically from spring through fall.

Program: **Support Group**
Support group meets on the first Wednesday of each month (except December) at 10:00 AM at Springfield Hospital.

Program: **Community Lectures / Blood glucose screening programs**

VETERANS ADMINISTRATION

Contact: Deborah Blood, RD, CDE
Lou Ann Merrill, RN
Toll Free: (866) 687-8387
(802) 295-9363 x 5796
(802) 296-6416 fax

Location: White Mountain Firm
215 North Main St
White River Junction, Vermont 05009-0001

Programs: **Diabetes Education Series -** American Diabetes Association recognized program. Eligible veterans may participate in a comprehensive diabetes education program (including family members) or come to individual appointments with a registered dietitian or nurse educator.

Program: **Support Group**: Every third Monday of the month, 11:00 a.m. – noon. Group meets in the patient education room across from the pharmacy. For more information call (802) 295-9363 x 5796.

DARTMOUTH-HITCHCOCK MEDICAL CENTER PEDIATRIC DIABETES PROGRAM

Contact: Samuel J. Cassella, MD
Ann S. Christiano, ARNP, CDE
Maura Jones, RD, CDE
Alyson Percy, RN
Patricia Ryan, ARNP
Mark Detzer, Ph.D
(603) 653-9877
(603) 650-0907 (fax)

Location: Pediatric Endocrinology
One Medical Center Drive
Lebanon, NH 03756-0001

Program: DMHC has a multidisciplinary Pediatric Diabetes clinic, staffed by a Pediatric Endocrinologist, two Nurse Practitioners, Pediatric Nutritionist, Social Worker and Clinical Psychologist. This team approach allows us to address many of the issues unique to children with diabetes and their families. We provide training and support for intensive management including pumps.

Medical Statement for Children Requiring Modifications in School Meals

Name of Student:	Birth date:
Name of Parent/Guardian:	Daytime Phone:

Disability or Medical Condition requiring modification of school meals:	**Major life activity affected** by student's disability *(please circle all that apply)*: caring for one's self, eating, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, working

Required Meal Modification *(check all which apply):*

_____RESTRICTED NUTRIENT	_____INCREASED NUTRIENT	_____MODIFIED TEXTURE
_____ Calorie _____ Controlled Carbohydrate _____ Protein _____ Sodium _____ Fat/Cholesterol	_____ Calorie _____Protein _____Fiber _____Other:	Describe required modification:

_____FOODS TO BE OMITTED FROM THE DIET

List all that apply	Foods that may be substituted

Special Utensils Needed:	
Tube Feeding Required:	
Other Accommodations needed:	
For student with a disability:	Signature of Physician: Date:
For non-disabled student:	Signature of Other Medical Authority Date:

Diabetes Care in the School and Day Care Setting

AMERICAN DIABETES ASSOCIATION

Diabetes is one of the most common chronic diseases of childhood. There are about 176,000 individuals <20 years of age with diabetes in the U.S. (1). The majority of these young people attend school and/or some type of day care and need knowledgeable staff to provide a safe school environment. Both parents and the health care team should work together to provide school systems and day care providers with the information necessary to allow children with diabetes to participate fully and safely in the school experience.

DIABETES AND THE LAW

— Federal laws that protect children with diabetes include Section 504 of the Rehabilitation Act of 1973, the Individuals with Disabilities Education Act of 1991 (originally the Education for All Handicapped Children Act of 1975), and the Americans with Disabilities Act. Under these laws, diabetes has been considered to be a disability, and it is illegal for schools and/or day care centers to discriminate against children with disabilities. In addition, any school that receives federal funding or any facility considered open to the public must reasonably accommodate the special needs of children with diabetes. Indeed, federal law requires an individualized assessment of any child with diabetes. The required accommodations should be provided within the child's usual school setting with as little disruption to the school's and the child's routine as possible and allowing the child full participation in all school activities.

Despite these protections, children in the school and day care setting still face discrimination. For example, some day care centers may refuse admission to children with diabetes, and children in the classroom may not be provided the assistance necessary to monitor blood glucose and may be prohibited from eating needed snacks. The American Diabetes Association works to ensure the safe and fair treatment of children with diabetes in the school and day care setting (www.diabetes.org/schooldiscrimination).

Diabetes care in schools

Appropriate diabetes care in the school and day care setting is necessary for the child's immediate safety, long-term well being, and optimal academic performance. The Diabetes Control and Complications Trial showed a significant link between blood glucose control and the later development of diabetes complications, with improved glycemic control decreasing the risk of these complications. To achieve glycemic control, a child must monitor blood glucose frequently, follow a meal plan, and take medications. Insulin is usually taken in multiple daily injections or through an infusion pump. Crucial to achieving glycemic control is an understanding of the effects of physical activity, nutrition therapy, and insulin on blood glucose levels.

To facilitate the appropriate care of the student with diabetes, school and day care personnel must have an understanding of diabetes and must be trained in its management and in the treatment of diabetes emergencies. Knowledgeable trained personnel are essential if the student is to avoid the immediate health risks of low blood glucose and to achieve the metabolic control required to decrease risks for later development of diabetes complications. Studies have shown that the majority of school personnel have an inadequate understanding of diabetes and that parents of children with diabetes lack confidence in their teachers' ability to manage diabetes effectively. Consequently, diabetes education must be targeted toward day care providers, teachers, and other school personnel who interact with the child, including school administrators, school coaches, school nurses, health aides, bus drivers, secretaries, etc. Current recommendations and up-to-date resources regarding appropriate care for children with diabetes in the school are universally available to all school personnel.

The purpose of this position statement is to provide recommendations for the management of children with diabetes in the school and day care setting.

GENERAL GUIDELINES FOR THE CARE OF THE CHILD IN THE SCHOOL AND DAY CARE SETTING

I. Diabetes Medical Management Plan

An individualized Diabetes Medical Management Plan should be developed by the parent/ guardian and the student's diabetes health care team. Inherent in this process are delineated responsibilities assumed by all parties, including the parent/guardian, the school personnel, and the student. These responsibilities are outlined in this position statement. The Diabetes Medical Management Plan should address the specific needs of the child and provide specific instructions for each of the following:

1. Blood glucose monitoring, including the frequency and circumstances requiring blood glucose checks.
2. Insulin administration (if necessary), including doses/injection times prescribed for specific blood glucose values and the storage of insulin.
3. Meals and snacks, including food content, amounts, and timing.
4. Symptoms and treatment of hypoglycemia (low blood glucose), including the administration of glucagon if recommended by the student's treating physician.
5. Symptoms and treatment of hyperglycemia (high blood glucose).

6. Checking for ketones and appropriate actions to take for abnormal ketone levels, if requested by the student's health care provider.

Figure 1 includes a sample Diabetes Medical Management Plan. For detailed information on the symptoms and treatment of hypoglycemia and hyperglycemia, refer to the *Medical Management of Type 1 Diabetes* (2). A brief description of diabetes targeted to school and day care personnel is included in the APPENDIX; it may be helpful to include this information as an introduction to the Diabetes Medical Management Plan.

II. Responsibilities of the various care providers

A. The parent/guardian should provide the school or day care provider with the following:

1. All materials and equipment necessary for diabetes care tasks, including blood glucose monitoring, insulin administration (if needed), and urine or blood ketone monitoring. The parent/guardian is responsible for the maintenance of the blood glucose monitoring equipment (i.e., cleaning and performing controlled testing per the manufacturer's instructions) and must provide materials necessary to ensure proper disposal of materials. A separate logbook should be kept at school with the diabetes supplies for the staff or student to record blood glucose and ketone results; blood glucose values should be transmitted to the parent/guardian for review as often as requested.
2. Supplies to treat hypoglycemia, including a source of glucose and a glucagon emergency kit, if indicated in the Diabetes Medical Management Plan.
3. Information about diabetes and the performance of diabetes-related tasks.
4. Emergency phone numbers for the parent/guardian and the diabetes health care team so that the school can contact these individuals with diabetes-related questions and/or during emergencies.
5. Information about the student's meal/snack schedule. The parent should work with the school to coordinate this schedule with that of the other students as closely as possible. For young children, instructions should be given for when food is provided during school parties and other activities.
6. In most locations and increasingly, a signed release of confidentiality from the legal guardian will be required so that the health care team can communicate with the school. Copies should be retained both at school and in the health care professionals' offices.

B. The school or day care provider should provide the following:

1. Training to all adults who provide education/care for the student on the symptoms and treatment of hypoglycemia and hyperglycemia and other emergency procedures. An adult and back-up adult(s) trained to *1*) perform fingerstick blood glucose monitoring and record the results; *2*) take appropriate actions for blood glucose levels outside of the target ranges as indicated in the student's Diabetes Medical Management Plan; and *3*) test the urine or blood for ketones, when necessary, and respond to the results.
2. Immediate accessibility to the treatment of hypoglycemia by a knowledgeable adult. The student should remain supervised until appropriate treatment has been administered, and the treatment should be available as close to where the student is as possible.
3. If indicated by the child's developmental capabilities and the Diabetes Medical Management Plan, an adult and back-up adult(s) trained in insulin administration.
4. An adult and back-up adult(s) trained to administer glucagon, in accordance with the student's Diabetes Medical Management Plan.
5. A location in the school to provide privacy during blood glucose monitoring and insulin administration, if desired by the student and family, or permission for the student to check his or her blood glucose level and to take appropriate action to treat hypoglycemia in the classroom or anywhere the student is in conjunction with a school activity, if indicated in the student's Diabetes Medical Management Plan.
6. An adult and back-up adult(s) responsible for the student who will know the schedule of the student's meals and snacks and work with the parent/guardian to coordinate this schedule with that of the other students as closely as possible. This individual also will notify the parent/guardian in advance of any expected changes in the school schedule that affect the student's meal times or exercise routine. Young children should be reminded of snack times.
7. Permission for the student to see the school nurse and other trained school personnel upon request.
8. Permission for the student to eat a snack anywhere, including the classroom or the school bus, if necessary to prevent or treat hypoglycemia.
9. Permission to miss school without consequences for required medical appointments to monitor the student's diabetes management. This should be an excused absence with a doctor's note, if required by usual school policy.
10. Permission for the student to use the restroom and have access to fluids (i.e., water) as necessary.
11. An appropriate location for insulin and/or glucagon storage, if necessary.

An adequate number of school personnel should be trained in the necessary diabetes procedures (e.g., blood glucose monitoring, insulin and glucagon administration) and in the appropriate response to high and low blood glucose levels to ensure that at least one adult is present to perform these procedures in a timely manner while the student is at school, on field trips, and during extracurricular activities or other school-sponsored events. These school personnel need not be health care professionals.

The student with diabetes should have immediate access to diabetes supplies at all times, with supervision as needed. Provisions similar to those described above must be available for field trips, extracurricular activities, other school-sponsored events, and on transportation provided by the school or day care facility to enable full participation in school activities.

It is the school's legal responsibility to provide appropriate training to school staff on diabetes-related tasks and in the treatment of diabetes emergencies. This training should be provided by health care professionals with expertise in diabetes unless the student's health care provider determines that the parent/guardian is able to provide the school personnel with sufficient oral and written informa-

Date of Plan _____ **Diabetes Medical Management Plan** Effective Dates_____

This plan should be completed by the student's personal health care team and parents/guardian. It should be reviewed with relevant school staff and copies should be kept in a place that is easily accessed by the school nurse, trained diabetes personnel, and other authorized personnel.

Student's Name _____ DOB_____ Date of Diabetes Diagnosis _____

Grade_____ Homeroom Teacher_____ Physical Condition: Diabetes Type 1 Diabetes Type 2

Contact Information

Parent/Guardian #1 _____ Address_____

Phone: Work_____ Home_____ Cell_____

Parent/Guardian #2_____ Address_____

Work_____ Home_____ Cell_____

Student's Doctor/Health Care Provider:

Name_____ Address_____

Phone:_____ Emergency Number:_____

Other Emergency Contacts:

Name_____ Relationship_____

Phone: Work_____ Home_____ Cell_____

Notify parents/guardian or emergency contact in the following situations:_____

_____

_____

Blood Glucose Monitoring

Target range for blood glucose is 70-150 70-180 Other

Usual times to check blood glucose:_____

Times to do extra blood glucose checks (circle all that apply)

Before exercise After exercise

Student exhibits symptoms of hyperglycemia Student exhibits symptoms of hypoglycemia

Other (explain)_____

Can student perform own blood glucose? Yes No

Exceptions:_____

_____

Type of blood glucose meter student uses: _____

Insulin

Usual lunchtime dose:_____

Base does of Humalog/Novolog/Regular Insulin at lunch (circle type of rapid-/short-acting insulin used) is _____ units or does flexible dosing using

_____ units/_____ grams carbohydrate.

Use of other insulin at lunch (circle type of insulin used): intermediate/NPH/lente _____ units or basal/Lantus/Ultralente _____units.

Insulin Correction Doses

Parental authorization should be obtained before administering a correction dose for high blood glucose levels: Yes No

_____ units if blood glucose is _____ to _____ mg/dl _____ units if blood glucose is _____ to _____ mg/dl

_____ units if blood glucose is _____ to _____ mg/dl _____ units if blood glucose is _____ to _____ mg/dl

_____ units if blood glucose is _____ to _____ mg/dl

Figure 1—*Diabetes Medical Management Plan.*

Can student give own injections? Yes No

Can student determine correct amount of insulin? Yes No

Can student draw correct dose of insulin? Yes No

_____Parents are authorized to adjust the insulin dosage under the following circumstances_____

_____

For Students With Insulin Pumps:

Type of pump:_____ Basal rates: _____ 12 a.m. to _____

_____ _____ to _____ _____ _____ to _____

Type of insulin in pump: _____

Type of infusion set: _____

Insulin/carbohydrate ratio: _____ Correction factor: _____

Student pump abilities/skills _____ Needs assistance: _____

Count carbohydrates:	Yes	No
Bolus correct amount for carbohydrates consumed	Yes	No
Calculate and administer corrective bolus	Yes	No
Calculate and set basal profiles	Yes	No
Calculate and set temporary basal rate	Yes	No
Disconnect pump	Yes	No
Reconnect pump at infusion set	Yes	No
Prepare reservoir and tubing	Yes	No
Insert infusion set	Yes	No
Troubleshoot alarms and malfunctions	Yes	No

For Students Taking Oral Diabetes Medication:

Type of medication: _____ Timing: _____

Other medications: _____ Timing: _____

Meals and Snacks Eaten at School

Is student independent in carbohydrate calculations and management? Yes No

Meal/snack _____ Time: _____ Food content/amount _____

Breakfast _____

Mid-A.M. snack _____

Lunch _____

Mid-P.M. snack _____

Dinner _____

Snack before exercise? Yes No

Snack after exercise? Yes No

Other times to give snacks and content/amount: _____

Preferred snack foods: _____

Foods to avoid, if any: _____

FIG. 1—*Continued*

Instructions for when food is provided to the class (e.g., as part of a class party or food sampling event): _____

_____

Exercise and Sports

A fast-acting carbohydrate such as _____ should be available at the site of exercise or sports.

Restrictions on activity if any _____

Student should not exercise if blood glucose level is below _____ mg/dl or above _____ mg/dl or if a moderate to large urine ketones are present.

Hypoglycemia (Low Blood Sugar)

Usual symptoms of hypoglycemia: _____

Treatment of hypoglycemia: _____

Glucagon should be given if the student is unconscious, having a seizure (convulsion), or unable to swallow.

Route _____, Dosage _____, site for glucagon injection: _____arm, _____thigh, _____other.

If Glucagon is required, administer it promptly, then call 911 or other emergency assistance and the parents/guardian.

Hyperglycemia (High Blood Sugar)

Usual symptoms of hyperglycemia: _____

Treatment of hyperglycemia: _____

Urine should be checked for ketones when blood glucose level are above _____ mg/dl.

Treatment for Ketones: _____

Supplies to Be Kept at School:

_____ Blood glucose meter, blood glucose test strips, batteries for meter

_____ Lancet device, lancets, gloves, etc.

_____ Urine ketone strips

_____ Insulin vials and syringes

_____Insulin pump and supplies

_____ Insulin pen, pen needles, insulin cartridges

_____ Fast-acting source of glucose

_____ Carbohydrate containing snack

_____ Glucagon emergency kit

Signatures

This Diabetes Medical Management Plan has been approved by:

_____ _____

Student's Physician / Health Care Provider Date

Acknowledged and received by:

_____ _____

Student's Parent / Guardian Date

_____ _____

Student's Parent / Guardian Date

_____ _____

Student's Parent / Guardian Date

FIG. 1—*Continued*

Table 1—*Resources for teachers, child care providers, parents, and health professionals*

Helping the Student with Diabetes Succeed: A Guide for School Personnel, National Diabetes Education Program, 2003; available online at www.ndep.nih.gov.

Diabetes Care Tasks at School: What Key Personnel Need to Know, Alexandria, VA, American Diabetes Association; available online at www.diabetes.org/schooltraining.

Health in Action: Diabetes and the School Community, American School Health Association, American Diabetes Association, Aug/Sept. 2002, Vol. 1, No. 1, 330-678-1601.

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Tappon D. Parker M, Bailey W: *Easy As ABC, What You Need to Know About Children Using Insulin Pumps in School*. Disetronic Medical Systems, Inc., 1-800-280-7801.

*These documents are available in the American Diabetes Association's Education Discrimination Packet by calling 1-800-DIABETES.

tion to allow the school to have a safe and appropriate environment for the child. If appropriate, members of the health care team should provide instruction and materials to the parent/guardian to facilitate the education of school staff. Educational materials from the American Diabetes Association and other sources targeted to school personnel and/or parents are available. Table 1 includes a listing of appropriate resources.

III. Expectations of the student in diabetes care

Children and youths should be able to implement their diabetes care at school with parental consent to the extent that is appropriate for the student's development and his or her experience with diabetes. The extent of the student's ability to participate in diabetes care should be agreed upon by the school personnel, the parent/guardian, and the health care team, as necessary. The ages at which children are able to perform self-care tasks are very individual and variable, and a child's capabilities and willingness to provide self-care should be respected.

1. *Preschool and day care.* The preschool child is usually unable to perform diabetes tasks independently. By 4 years of age, children may be expected to generally cooperate in diabetes tasks.
2. *Elementary school.* The child should be expected to cooperate in all diabetes tasks at school. By age 8 years, most children are able to perform their own fingerstick blood glucose tests with supervision. By age 10, some children can administer insulin with supervision.
3. *Middle school or junior high school.* The student should be able to administer insulin with supervision and perform self-monitoring of blood glucose under usual circumstances when not experiencing a low blood glucose level.
4. *High school.* The student should be able to perform self-monitoring of blood glucose under usual circumstances when not experiencing low blood glucose levels. In high school, adolescents should be able to administer insulin without supervision.

At all ages, individuals with diabetes may require help to perform a blood glucose check when the blood glucose is low. In addition, many individuals require a reminder to eat or drink during hypoglycemia and should not be left unsupervised until such treatment has taken place and the blood glucose value has returned to the normal range.

MONITORING BLOOD GLUCOSE IN THE CLASSROOM

— It is best for a student with diabetes to monitor a blood glucose level and to respond to the results as quickly and conveniently as possible. This is important to avoid medical problems being worsened by a delay in monitoring/treatment and to minimize educational problems caused by missing instruction in the classroom. Accordingly, as stated earlier, a student should be permitted to monitor his or her blood glucose level and take appropriate action to treat hypoglycemia in the classroom or anywhere the student is in conjunction with a school activity, if preferred by the student and indicated in the student's Diabetes Medical Management Plan. However, some students desire privacy for blood glucose monitoring and other diabetes care tasks and this preference should also be accommodated.

In summary, with proper planning and the education and training of school personnel, children and youth with diabetes can fully participate in the school experience. To this end, the family, the health care team, and the school should work together to ensure a safe learning environment.

APPENDIX: BACKGROUND INFORMATION ON DIABETES FOR SCHOOL PERSONNEL

— Diabetes is a serious, chronic disease that impairs the body's ability to use food. Insulin, a hormone produced by the pancreas, helps the body convert food into energy. In people with diabetes, either the pancreas does not make insulin or the body cannot use insulin properly. Without insulin, the body's main energy source—glucose—cannot be used as fuel. Rather, glucose builds up in the blood. Over many years, high blood glucose levels can cause dam-

age to the eyes, kidneys, nerves, heart, and blood vessels.

The majority of school-aged youth with diabetes have type 1 diabetes. People with type 1 diabetes do not produce insulin and must receive insulin through either injections or an insulin pump. Insulin taken in this manner does not cure diabetes and may cause the student's blood glucose level to become dangerously low. Type 2 diabetes, the most common form of the disease typically afflicting obese adults, has been shown to be increasing in youth. This may be due to the increase in obesity and decrease in physical activity in young people. Students with type 2 diabetes may be able to control their disease through diet and exercise alone or may require oral medications and/or insulin injections. All people with type 1 and type 2 diabetes must carefully balance food, medications, and activity level to keep blood glucose levels as close to normal as possible.

Low blood glucose (hypoglycemia) is the most common immediate health problem for students with diabetes. It occurs when the body gets too much insulin, too little food, a delayed meal, or more than the usual amount of exercise. Symptoms of mild to moderate hypoglycemia include tremors, sweating, lightheadedness, irritability, confusion, and drowsiness. A student with this degree of hypoglycemia will need to ingest carbohydrates promptly and may require assistance. Severe hypoglycemia, which is rare, may lead to unconsciousness and convulsions and can be life-threatening if not treated promptly.

High blood glucose (hyperglycemia) occurs when the body gets too little insulin, too much food, or too little exercise; it may also be caused by stress or an illness such as a cold. The most common symptoms of hyperglycemia are thirst, frequent urination, and blurry vision. If untreated over a period of days, hyperglycemia can cause a serious condition called diabetic ketoacidosis (DKA), which is characterized by nausea, vomiting, and a high level of ketones in the blood and urine. For students using insulin infusion pumps, lack of insulin supply may lead to DKA more rapidly. DKA can be life-threatening and thus requires immediate medical attention.

References

1. *American Diabetes Association Complete Guide to Diabetes.* Alexandria, Virginia, American Diabetes Association, 2005
2. *Medical Management of Type 1 Diabetes.* Alexandria, Virginia, American Diabetes Association, 2004

2 to 20 years: Boys
Stature-for-age and Weight-for-age percentiles

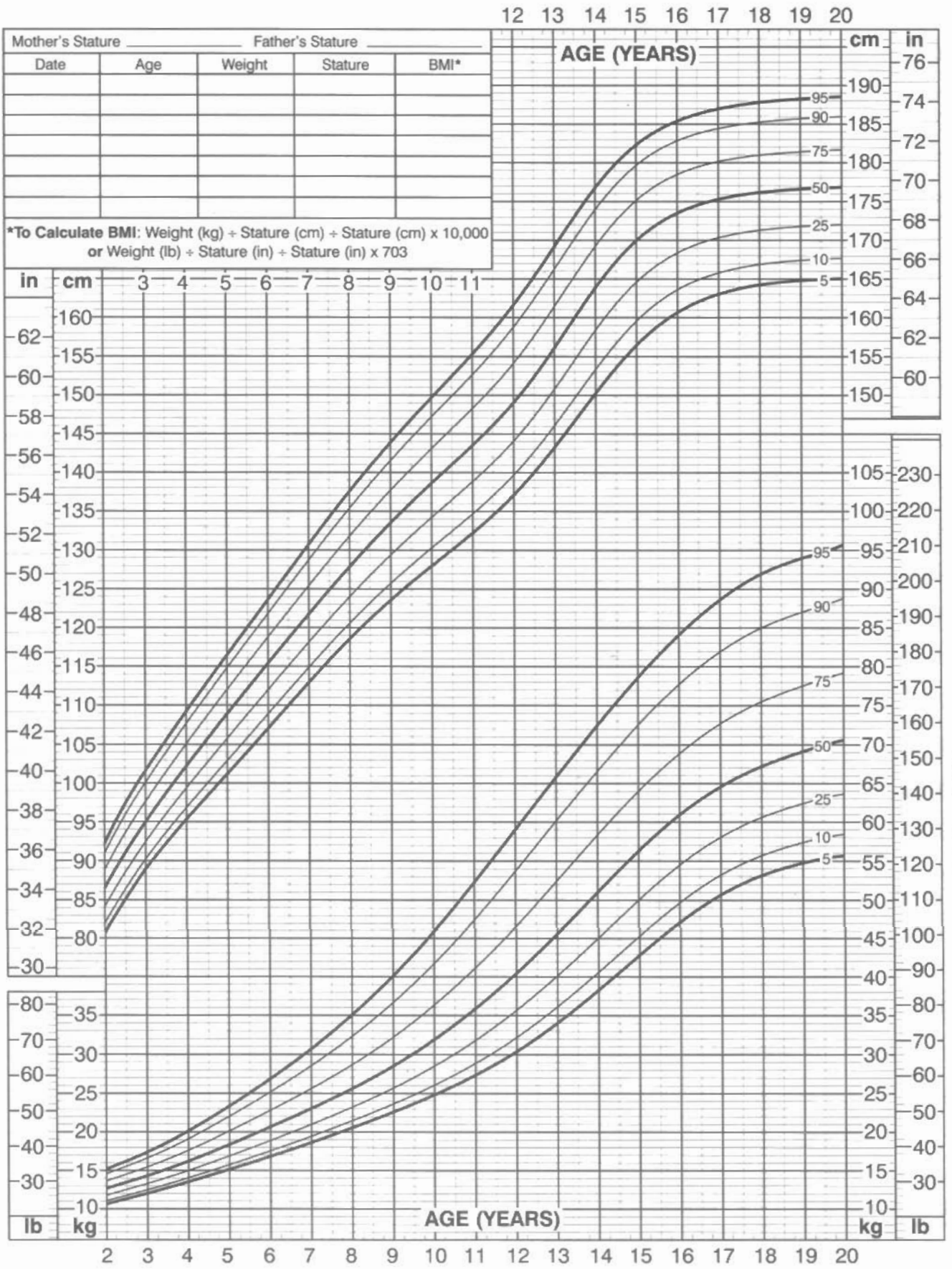
NAME _____

RECORD # _____

Mother's Stature _____ Father's Stature _____

Date	Age	Weight	Stature	BMI*

*To Calculate BMI: Weight (kg) ÷ Stature (cm) ÷ Stature (cm) x 10,000
or Weight (lb) ÷ Stature (in) ÷ Stature (in) x 703



Revised and corrected November 28, 2000.

SOURCE: Developed by the National Center for Health Statistics in collaboration with the Nation Center for Chronic disease Prevention and Health Promotion (2000).

http://www.cdc.gov/growthcharts

VDH 256C

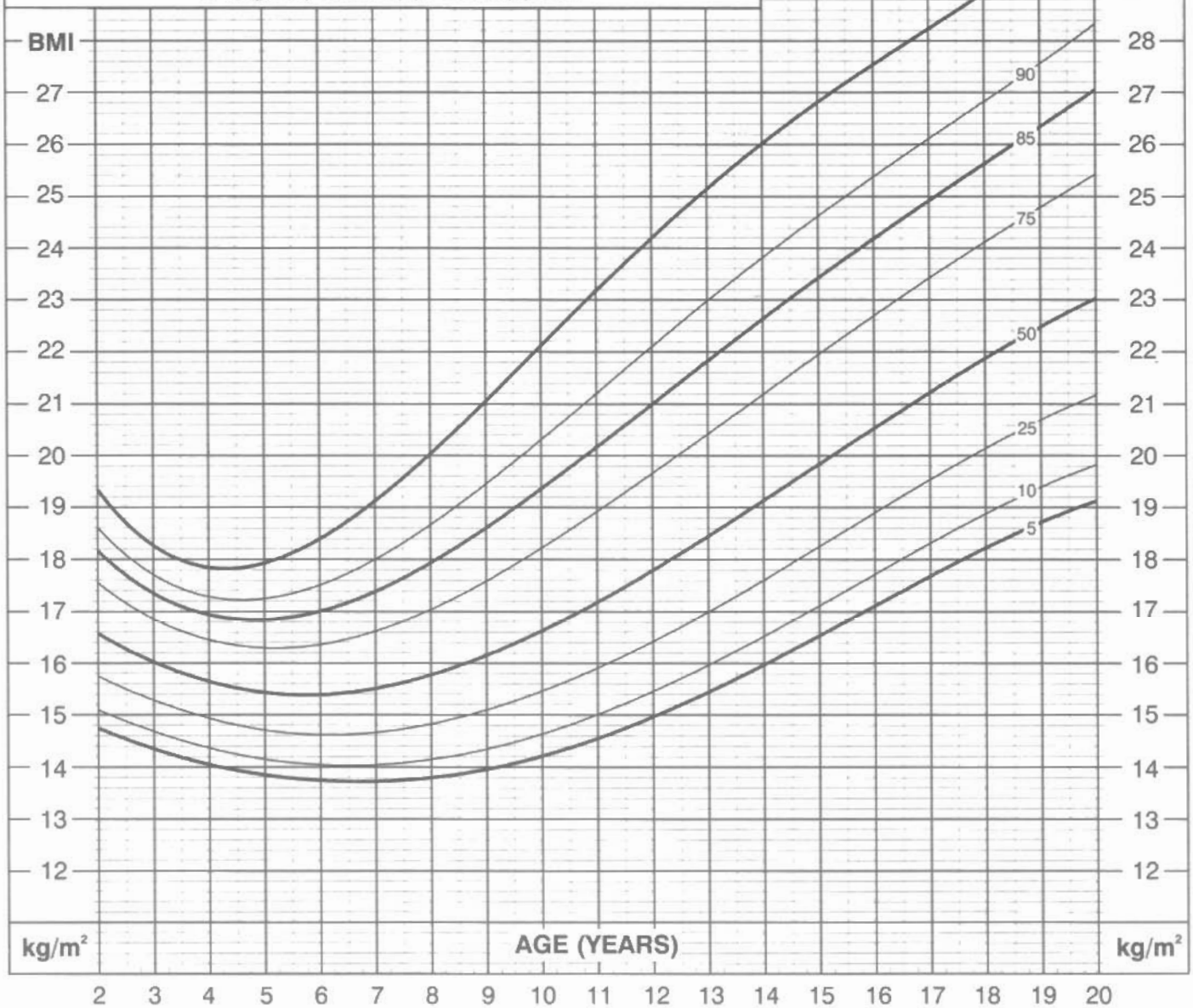
2 to 20 years: Boys
Body mass index-for-age percentiles

NAME _____

RECORD # _____

Date	Age	Weight	Stature	BMI*	Comments

***To Calculate BMI**: Weight (kg) ÷ Stature (cm) ÷ Stature (cm) x 10,000
or Weight (lb) ÷ Stature (in) ÷ Stature (in) x 703



SOURCE: Developed by the National Center for Health Statistics in collaboration with the National Center for Chronic Disease Prevention and Health Promotion (2000).
http://www.cdc.gov/growthcharts

CDC

2 to 20 years: Girls
Stature-for-age and Weight-for-age percentiles

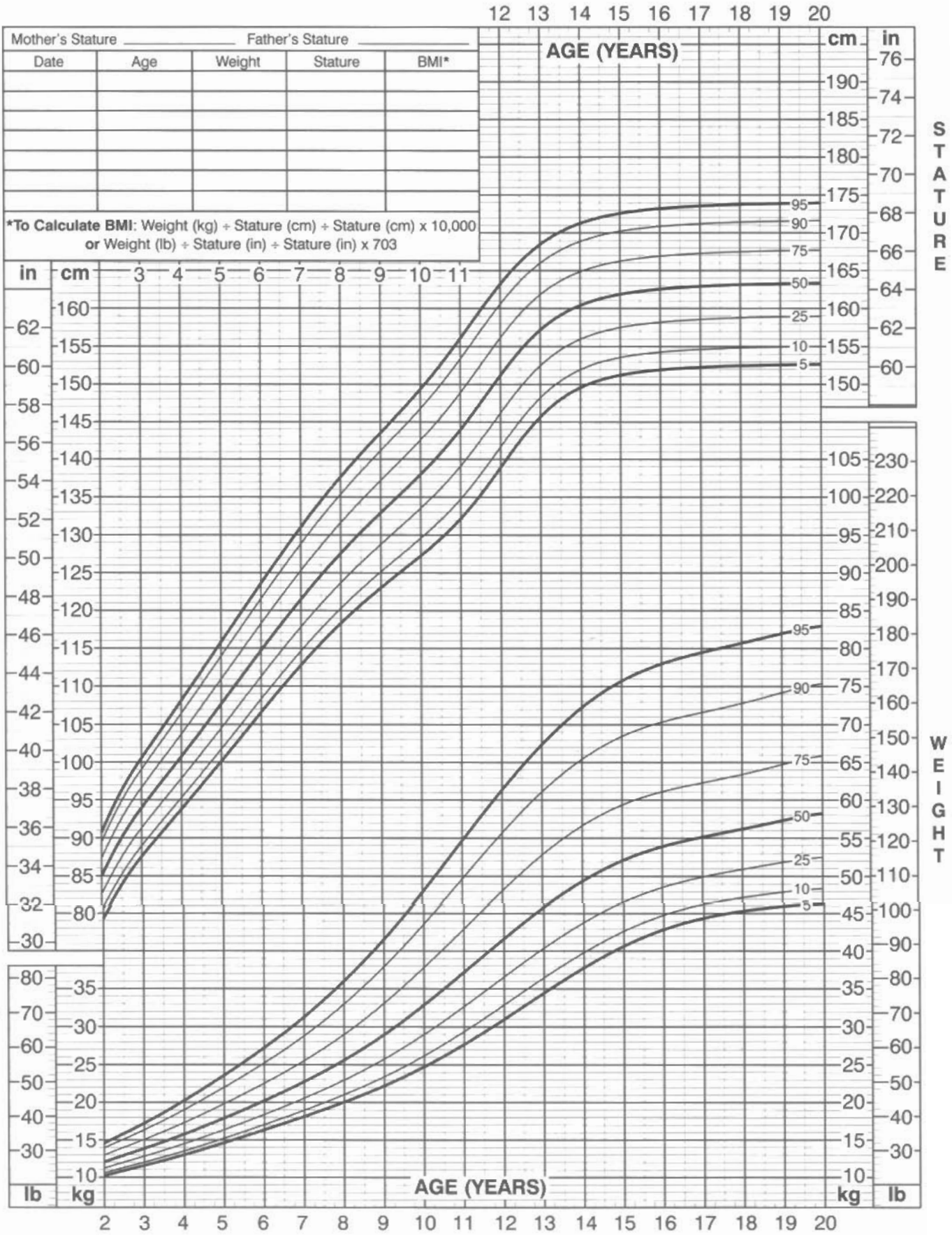
NAME _____

RECORD # _____

Mother's Stature _____ Father's Stature _____

Date	Age	Weight	Stature	BMI*

***To Calculate BMI**: Weight (kg) ÷ Stature (cm) ÷ Stature (cm) x 10,000
or Weight (lb) ÷ Stature (in) ÷ Stature (in) x 703



Revised and corrected November 28, 2000.

SOURCE: Developed by the National Center for Health Statistics in collaboration with the Nation Center for Chronic disease Prevention and Health Promotion (2000).

http://www.cdc.gov/growthcharts

VDH 255C

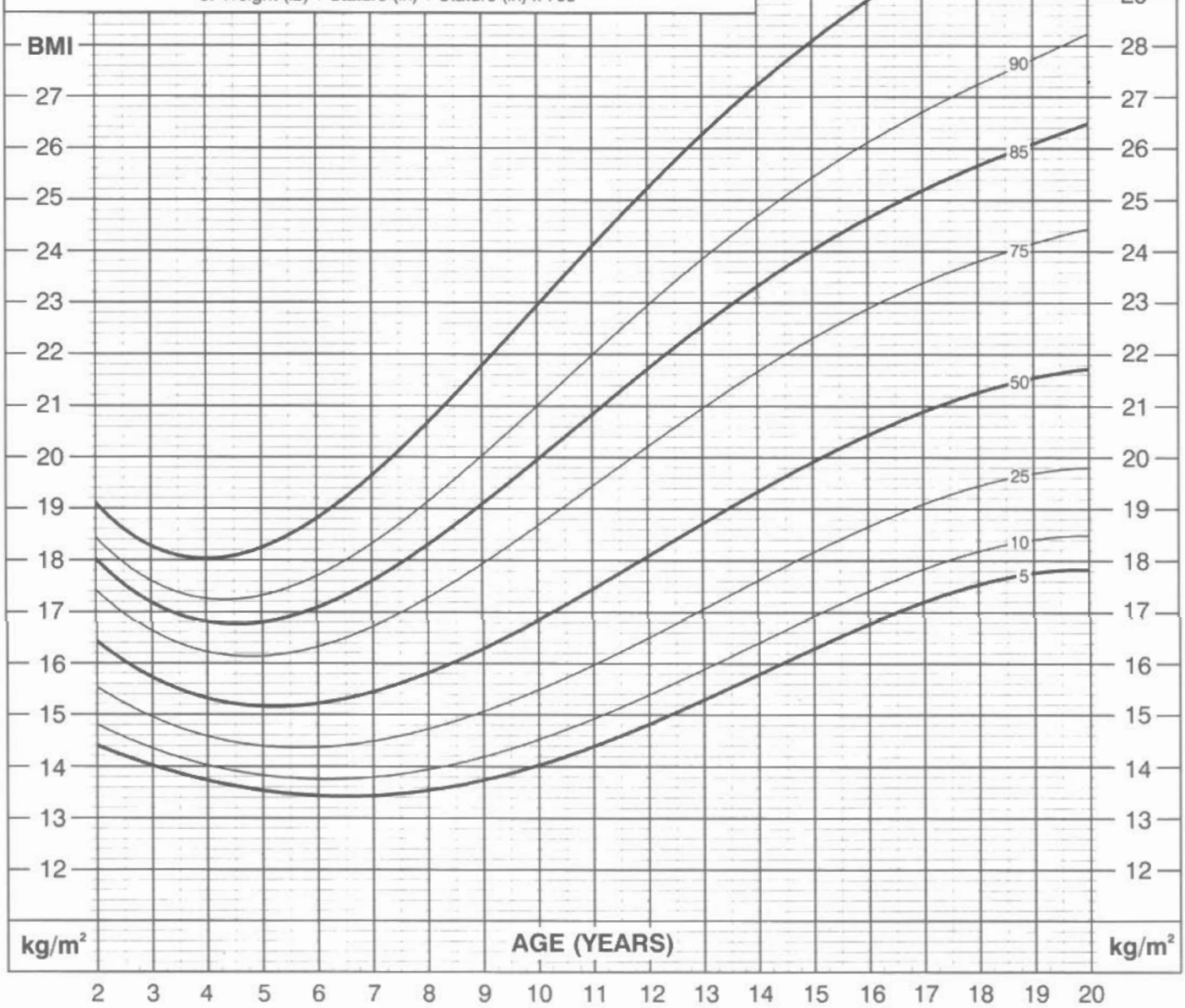
2 to 20 years: Girls
Body mass index-for-age percentiles

NAME _____

RECORD # _____

Date	Age	Weight	Stature	BMI*	Comments

***To Calculate BMI:** Weight (kg) ÷ Stature (cm) ÷ Stature (cm) x 10,000
or Weight (lb) ÷ Stature (in) ÷ Stature (in) x 703



SOURCE: Developed by the National Center for Health Statistics in collaboration with the National Center for Chronic Disease Prevention and Health Promotion (2000).
http://www.cdc.gov/growthcharts

CDC